487 p., including appendices A-G, various authorships; 33 unnumbered pls. in Stansbury's Report, 10 numbered pls. in Zoology appendix, 9 in Botany section, 4 in Palaeontology; 2 maps.

1853. As above, but: Printed by order of House of Representatives of the United States. Robert Armstrong, Washington. 495 p.; appendices, plates, and maps as in first edition.

A New Species of the Genus *Eurytoma* Illiger Parasitic on Bees of the Genus *Ceratina* Latreille

(Hymenoptera: Eurytomidae and Apoidea)

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The specimens on which the new species is based were sent to me by Dr. Gerald I. Stage, Division of Biological Control, University of California, Albany, California.

Eurytoma apiculae Bugbee, new species

Female.—Length averages 4.2 mm (3.1-4.8). Black except for orange-brown legs, scape and brown wing veins. Abdomen averages 2.1 mm (1.8-2.3) in length; oval from a lateral and a dorsal view with medium lateral compression; elongate sixth tergite averages 0.55 mm (0.52-0.70); fifth tergite averages 0.30 mm (0.28-0.40) in length; sixth about 1.8 times the length of the fifth; fine sculpturing covers the lower, lateral one-half to two-thirds of the surface of the sixth tergite; ninth tergite averages 0.20 mm (0.15-0.22) in length and is in line with the horizontal axis of the abdomen; 4-12 short, silvery white hairs on dorsolateral face of sixth tergite. Genitalia average 2.0 mm (1.9-2.1) in length and 1.1 mm (0.97-1.2) in height; dorsal valves narrow and black for horizontal length; averaging 0.25 mm at greatest width; dorsal valves and ventral valves turn dorsally, anteriorly, at approximately a right angle; stylet arch in an oblique plane. Propodeum broad and with a shallow depressed surface; central furrow indicated in dorsal one-third to one-half only by indistinct lateral carinae; short central carina usually present; rest of surface covered with ridges, more or less transverse in center and irregularly vertical or oblique laterally. Surface of head and thorax covered with large, deep umbilicate punctures. Pronotum as wide as mesonotum. Prominent oblique carina in depression between mesepisternum and mesepimeron. Antennae filiform; flagellum six-segmented; first longer than wide; next five become progressively shorter so that 5 is about as long as wide; terminal unit of 3 closely fused segments.

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Wing veins with the marginal and postmarginal linear, and about equal in length; marginal averages 0.35 mm (0.32–0.40) and postmarginal averages 0.35 mm (0.29–0.40) in length.

Male.—Length averages 3.3 mm (2.7-4.2). Black except for orange-brown legs, outer face of scape and dark brown wing veins. Legs may have some black infuscation on hind femora and occasionally on hind tibia and at base of mid-femora. Flagellum of antenna seven-segmented; first six segments petiolate; 7 appears to be made up of two closely fused segments.

Types.—17 females and 16 males. Holotype female and allotype from a series of eight females and 10 males from Contra Costa County, California, Russell Tree Farm. Collected 8 July 1965 (nest 261) and 23 July 1965 (nest R-78) from nests of Ceratina punctigena, T. Brown and H. Daly, and a series of three females and two males from Yolo County, California, Putah Creek, collected 28 May 1965 (nest 142) from C. punctigena, R. Sage and H. Daly. Types deposited in U. S. National Museum, Washington, D. C. and paratypes in the California Insect Survey Collection of the University of California, Berkeley. Rest of paratype series (six females and four males) from Contra Costa County, California Lafayette Reservoir, collected 23 July 1965 (nest 353), pupal parasites of C. nanula (emerged beginning 26 July 1965, one per host pupa), T. Brown and H. Daly; and one female and two males from 6 miles southwest of Davis, Solano County, California collected 23 August 1965 (nest 420), pupal parasites of C. dallatorreana (males emerged 31 August 1965 and female 5 September 1965), T. Brown and H. Daly.

Type Locality.—Contra Costa County, California, Russell Tree Farm, 4 airline miles northeast of Orinda.

Hosts.—Ceratina punctigena Cockerell, C. nanula Cockerell, and C. dallatorreana Friese.

Remarks.—The new species runs, in an unpublished key to the females of the genus Eurytoma, to a couplet which includes a new, undescribed species bred from the apple curculio (Tachypterellus quadrigibbus (Say)) and Eurytoma diastrophi Walsh. The orange—brown color of the legs, equal marginal and postmarginal wing veins, unique seven-segmented flagellum of the male antenna, and the distinctive hosts will easily separate this new species from the other two species.

Males of *Eurytoma appendigaster* (Swederus) that I have examined in the U. S. National Museum collection also show a seven-segmented flagellum similar to the males of *E. apiculae* Bugbee. This is as far as the resemblance goes, however, as the two species are quite distinct when other characteristics are compared.